

Plants for Bees by *Noel Jupp* OAM, Dip Hort, QP Dept Ag & Fisheries

First of all, let me emphasise that I am not a bee keeper. My grandfather was, my father was and my uncle was but one or two aggravated stings and I am in hospital. Native bees however are a different thing altogether.

Over the last 4 or 5 years there has been an increasing and enthusiastic interest in all things native bees and that is a good thing. Fortunately we have people like Mark to feed our thirst for knowledge on native bees. A lot of the information I will pass on today is from my own observations, it is very hard to get a full understanding from books.

The other day I let off about this to a friend of mine who said that you can't put everything in a book so I fired back and said but surely they can get the basics right!

So we will start with trees. Trees are good for all bees; honey bees as well as native bees but remember you need a large area to plant them. The trees must be widely spaced because a tree with a wide spreading crown will yield 100 times more honey or nectar than 20 trees spaced 4 or 5 metres apart so in a hectare of ground plant no more than 100-200 trees.

The downside is that trees will take many years to flower and even then, they may not flower every season. The upside is that you have plenty of room to plant under canopy species, shrubs, groundcovers and even annuals if you are desperate.

The important thing to remember is you must plant a wide range of plants so the bees can forage all year especially in the warmer coastal areas and diversity is key. Just like us, bees need a balanced diet to stay healthy and active.

I have prepared a tree list suitable for this climate zone. The trees that are local are marked with an asterisk. Some of the old hands might arc up when I have included a stringy bark but the *Eucalyptus globoidea* provides not only nectar but pollen as well.

Now we are down to the shrubs etc and this is where the real work starts. Most of the shrubs flower every year and they mostly flower within one or two years of planting and with some judicious pruning will mostly carry on for years.

This plant is *Leptospermum parvifolium* (*right*) – we have recorded this near Taree airport, near Tea Gardens and at Clarence Town. I found one plant at the Vintage Golf



Course. It is fairly common in the Hez zone near Kurri Kurri and as you go further west to the south west slopes it is quite common. It only grows to about 1 metre tall but the important thing is that it flowers in late winter. The honey bees love it and it yields a green honey that the honey bees put in the brood frames, why we do not know. I have asked the boffins to look into it but no one seems very interested. What the native bees do I do not know at this stage.



The Leptospermums or Tea Trees are an invaluable source of nectar and in this general area you have the Jelly Bush, *Leptospermum polygalifolium* var *cismontanum* and in some cases *Leptospermum polygalifolium* itself (*left*). This one flowers in spring to late spring. Then you have *Leptospermum arachnoides*, *Leptospermum laevigatum* right on the coast, *Leptospermum semibaccatum* and

Leptospermum liversidgei.

The *Leptospermum laevigatum* does not yield much in the way of nectar but the others do and *Leptospermum liversidgei* is very valuable in that it flowers in late summer. Outside of the area you have *Leptospermum scoparia*, the Manuka honey tree and *Leptospermum rotundifolium*.

Leptospermum cardwell (*right*) is from Queensland and is low growing, dense and all the bees fight over it. *Leptospermum argenteum* (*below*) is



supposed to only occur on the Barrington

Tops but we

have found it in the Masseys Creek State Forest on the Paterson River. It loves wet ground and if it is happy will grow to a small tree. It flowers in

summer in an absolute mass of flowers and besides

honey bees I have counted 5 species of native bees on my trees. Originally I thought I had 7 until I realised that 2 of them have separate colours for male and female. The bees go berserk over this one. Basically, most *Leptospermum* are good bee trees and there are lots of them.



Next we will look at Callistemons or Bottle Brush. Callistemon supply both nectar and pollen. The first one is Callistemon salignus valued for both nectar and pollen.

Callistemon viminalis (*below*) has similar attributes. Callistemon sieberi can flower from late summer to early autumn and the

bees work it well.

There are quite a few other Callistemon that are worthwhile. I have noted native bees on Callistemon pachyphillus near Bulahdelah. This one, like Callistemon linearis does not mind wet feet so if you have a very wet area then this is the one to use.



We have recently started working on a new Callistemon known as Sugar Creek (*right*) from near Bungwahl. It is highly scented and bees of all types swarm all over it. Besides these species there are countless hybrids or forms that can fill the bill.

Next on the lists are the first cousins to the Callistemons, the Melaleucas. The most common one in this area is the Melaleuca quinquenervia. Now this one is rated from

inedible to distinct and flavoured. But all this appears to be related to where it grows.

Melaleuca linariifolia commonly known as Snow in Summer has a stimulating pollen and a dark and strongly flavoured honey. Melaleuca stypheloides would have similar properties. Once again there is a wide range of other species and forms available.



Next we have the Grevilleas. The large flowered Grevilleas such as Honey Gem, Moonlight (*right*) and Sandra Gordon literally drip with nectar and are a favourite of honey eaters and honey bees. But I can't say that I have seen that many native bees on them. However when it comes to the smaller flowered types such as Grevillea arenaria, Grevillea granulifera, Grevillea montana

and *Grevillea sericea* (*right*) it is a different story. The native bees are all over them. Most of these have small almost insignificant flowers and you only see the occasional honey bee on them but they seem to be very attractive to most native bees.



A close relation to the Grevilleas is *Buckinghamia cellisima*. Bees of all shapes and sizes love this one, it yields good pollen and honey. *Grevillea robusta* is a tree sized Grevillea and flowers on a regular basis. It yields good pollen and a dark amber high density honey. A lot of these smaller flowered Grevilleas start flowering in late winter and go through to late spring.

Banksias are very important because they flower in winter, the most important being *Banksia spinulosa* (*right*). It is very attractive to all bees; mature plants bear a lot of large flowers. *Banksia aemula* (*below*) and *Banksia serrata* are also highly attractive to bees. *Banksia serrata* yields good winter stores and can be relied on.



Banksia integrifolia flowers every year starting in autumn and going right through winter and provides abundant pollen and nectar. Once again, there is a wide range of Banksias that are available for planting. For instance, *Banksia oblongifolia* is a fairly small round bush that flowers freely, absolutely ideal for bees of any kind.



So far we have talked about everything that is good for bees but what about things that are good for the bees and us as well? The first one is Macadamias, the main pollinator of these is native bees, and they love them. Next up we have lemons and mandarins but remember that with these the seedlings take years to flower but cutting grown plants or grafted plants flower within 2 to 3 years. This

also applies to the native Finger Limes or Round Limes, these can be very slow growing in the ground but if you buy young tubestock and pot them on, they grow a lot faster.

So now let's go outside the square and look at some of the unusual or way out types. First of all, let's try *Bursaria spinosa*, the Blackthorn or in the Aboriginal language the Kurwan. Ok, it's prickly and thorny but in good years it will flower twice. With honey bees it yields significant nectar that sets like a rock. What the native bees do I do not know but I do know that they swarm all over it. This one should be planted more because it is a host to a small wasp that parasites the leaf eating beetles.

Next we have *Callistemon Baroondah Station* (*right*), an as yet unnamed species from Western Queensland. This bears a mass of small nearly white flowers to a pretty light pink, bees of all types swarm over it but its best attribute is that it flowers 14 days after every storm, doesn't matter what time of year it is all it needs is a storm.



Corymbia filicifolia, the red flowering gum from Western Australia grows quickly, flowers quickly and is a very good source of nectar. Once it starts to flower it will continue to flower every year. *Corymbia eximia* is also a regular so far as flowers go; it has very little nectar but is a good source of pollen.

Eucalyptus robusta, the swamp mahogany is a fast grower and reliable producer of small quantities of nectar and pollen.

Scaevola aemula (*right*) is listed as being ideal for native bees but I have yet to see any bees on them.

Hardenbergia violacea is the same but I do occasionally see bees on it. *Syzygium luehmannii*, the small leaf Lilly Pilly attracts a lot of native bees. It is easily grown and is a good hedge plant.



Thryptomene (*left*) is a very useful fill in plant in the garden and widely used as a cut flower but native bees also like it. It yields good nectar and pollen in spring.

Dodonaea viscosa is another useful pollen and nectar producer in spring. It is a hardy plant that flowers every year.

Jacksonia scoparia (*right*) is often shunned by many people but if grown and managed correctly it certainly puts on a show and is a valuable pollen producer but a bit light on in the nectar side. It loves to grow in hard dry rocky ground.



Eucalyptus macroryncha, the red stringy bark flowers about every 2 years and is noted for its nectar production.

Eucalyptus crebra, the narrow leaf ironbark produces good nectar and pollen but may lack solecine in some years.

Eucalyptus sideroxylon, the red ironbark, Corymbia citriodora, the lemon scented gum and Eucalyptus camaldulensis, the river red gum are all important honey trees.

So far as the native bees go, there is an amazing range of annuals that provide them with good forage but this is a bit outside my field so it is up to you to find out what is useful and what is not.

And then of course we cannot overlook the weeds, I am not encouraging you to grow weeds but a surprising number provide good forage for bees of all types and then there is always the pastures, things like white clover and Lucerne are well known in the honey trade; but please remember that so far as the native bees go there is an almost endless array of native plants to sustain them.